THE STORY OF THE FEDERAL RESERVE SYSTEM

FEDERAL RESERVE BANK OF NEW YORK

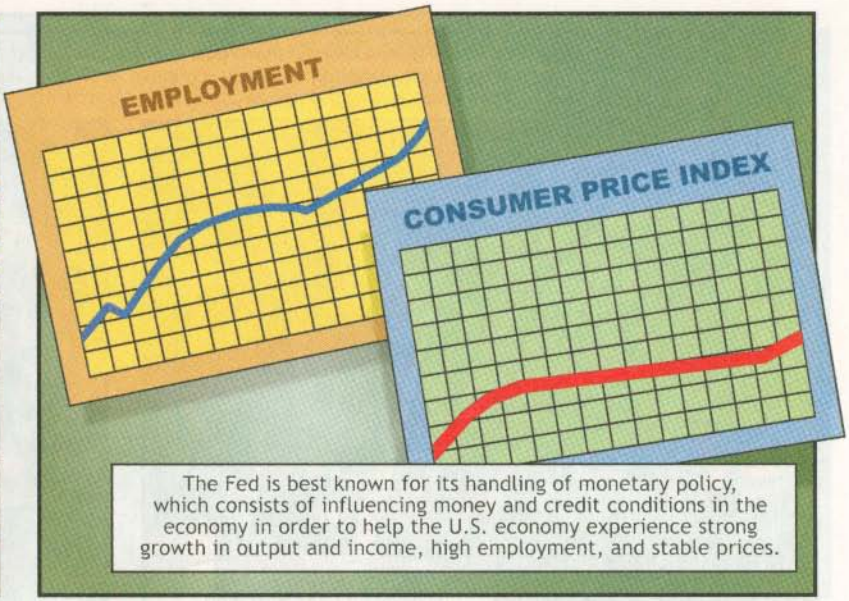
You're probably familiar with one or more banks in your neighborhood.
LOCAL BANK
BANK
Story by: Ed Steinberg
Steven Malin
Art by: Jesse Chen

Perhaps you or someone in your family has a checking or savings account at a local bank...
I'd like to deposit this in my savings account, please.

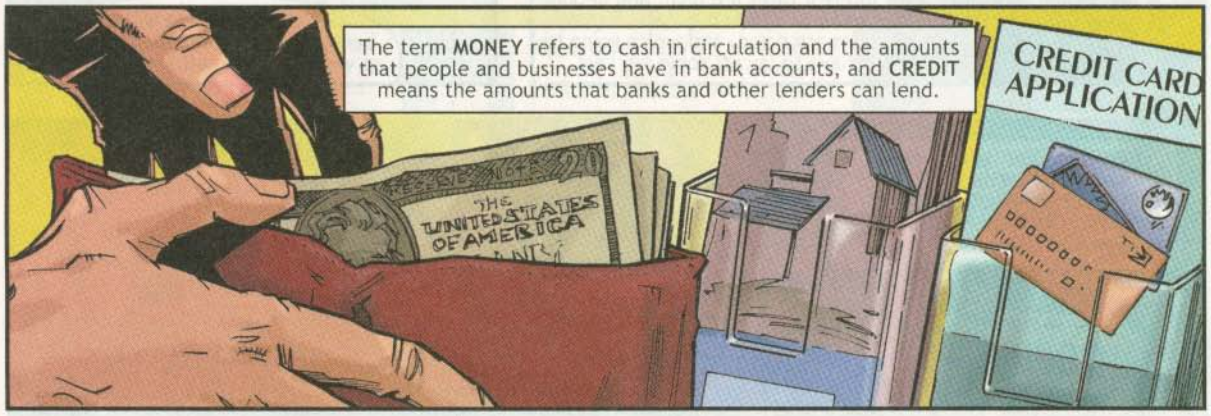
... or perhaps someone in your family has recently taken out a loan at a bank --- to buy a car, for example.
ANNUAL CLEARANCE SALE
I don't have enough cash to buy a new car, but if I can spread the payments out over four years, I can afford it.

LOAN
The Federal Reserve System (known as "the Fed") is the nation's central bank.
It doesn't provide services to individuals the way your neighborhood bank does...

...but it does perform a variety of tasks to help the U.S. economy function smoothly and meet the nation's economic goals.



The Fed is best known for its handling of monetary policy, which consists of influencing money and credit conditions in the economy in order to help the U.S. economy experience strong growth in output and income, high employment, and stable prices.



The term **MONEY** refers to cash in circulation and the amounts that people and businesses have in bank accounts, and **CREDIT** means the amounts that banks and other lenders can lend.

The job of making monetary policy often is a balancing act, as the Fed has to make sure that money and credit don't grow either too slowly or too rapidly.

If they grow too slowly, funds won't be available for loans, and people and businesses will find it harder to borrow to make major purchases.

I'm afraid you won't be able to buy the car. Interest rates are way up because there's not much money to lend, and the monthly payments at the higher rates are more than you can afford.

I know you would like to expand your factory, but because we don't have much money to lend, we have to charge a high interest rate. You wouldn't be able to afford the monthly payments.

Insufficient money and credit growth can lead to a recession, a period in which economic activity (such as production and spending) declines and unemployment rises.
SALES
Because lenders don't have much money to lend, interest rates are high, and people can't afford to buy cars. So, our sales are down, and we're going to have to lay off some workers.
Nobody's building now, because interest rates are so high, so we have to lay off some workers.
On the other hand, when money and credit grow too much, the result can be inflation – a sustained and rapid increase in the price level.
$600
$500
$400
$550
$450
$350
How can you raise your prices so often?
Well, everyone who comes in to buy seems to have a lot of money to spend, so we figure we can raise prices and still sell the appliances.
Inflation has many bad effects. One is that some people's incomes don't go up as fast as prices, so inflation reduces their purchasing power—what they can afford to buy.
SUPER SPECIAL
SALE
I got a 3% raise but prices are up 8%, so I'm worse off now than I was before. I guess I'll have to eat out less often or cut back on how much clothing I buy.

By making it hard for businesses to plan, inflation also can lead to uncertainty and instability in the economy.
Our costs are way up, and if we raise our prices enough to cover them, our sales may suffer.
Lumber and steel prices have risen, but our customers may not be prepared to pay higher construction fees. They may postpone building until prices settle down.
The uncertainty that inflation causes can lead businesses to cut purchases of new equipment and buildings.
The drop in business investment, in turn, can hurt the economy's ability to produce in the future.
Last year, when inflation created so much uncertainty, we stopped buying machinery and now we're having trouble keeping up with our orders.
So to try to prevent both recessions and inflation, the Fed has three main monetary policy tools: open market operations, reserve requirements, and the discount rate.
OPEN MARKET OPERATIONS
DISCOUNT RATE
RESERVE REQUIREMENTS
MONEY AND CREDIT CONDITIONS
THE ECONOMY

Open market operations are purchases and sales by the Fed of U.S. government securities, which are large IOUs of the federal government. When the Fed buys securities, it pays for them by crediting the amount of the purchase to the account that the seller's bank has at the Fed. The bank, in turn, credits the seller's account.

Thus, open market purchases by the Fed provide the banking system with additional funds to lend.

We have more to lend now that the Fed has bought some government securities and the proceeds have been deposited in the bank.

In that way, open market purchases tend to lower the federal funds rate, the interest rate that banks charge each other on very short-term loans.

FEDERAL FUNDS RATE

A drop in the federal funds rate can lead to a decline in the rates that banks charge on loans and pay on deposits.

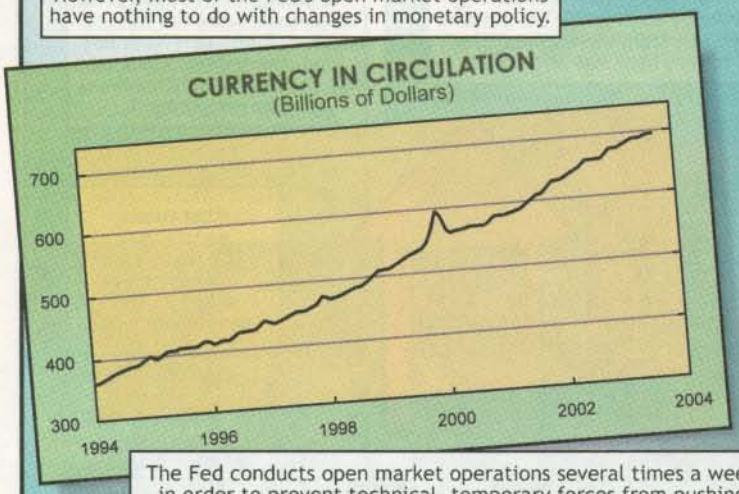
Now that the bank doesn't have to pay as much to acquire funds, we can charge you a lower interest rate, too.

And, when interest rates fall, spending in the economy eventually increases.

Now that interest rates have fallen, we can afford the construction project we've been talking about.

The opposite occurs when the Fed sells government securities, an unusual occurence.
The Fed collects payment for the securities by subtracting the amount of the sale from the account that the buyer's bank has at the Fed.
The bank, in turn, subtracts the amount from the buyer's account. Banks now have less to lend, the federal funds rate may rise, and some borrowing may be discouraged.
That means people may buy fewer cars and businesses may buy less new equipment.
SECURITIES
BANK
INTEREST RATES
The Fed does not conduct its open market operations with all individuals and financial institutions.
FED
Psst, anyone want to buy two billion dollars' worth of government securities?
Rather, the Fed deals with about twenty large firms – brokers and broker-dealers – that buy and sell government securities and can handle the large purchases and sales efficiently, quickly, and safely.
Indeed, the Fed's open market operations are conducted electronically in a matter of minutes.
Did I miss anything while I was out?
Yes, we just carried out today's open market operations.
When the Fed decides to change its monetary policy, it uses open market operations to implement the change.
THE DAILY SUN
FED EASES MONETARY POLICY
OPEN MARKET PURCHASES GIVE BANKS MORE FUNDS TO LEND
EVENING NEWS
FED RAISES INTEREST RATES
OPEN MARKET SALES DRAIN FUNDS FROM BANKING SYSTEM

However, most of the Fed's open market operations have nothing to do with changes in monetary policy.



The Fed conducts open market operations several times a week in order to prevent technical, temporary forces from pushing money and credit conditions in some undesired direction. One of these forces is the amount of cash in circulation.

The amount of cash that people have with them is not constant. It varies seasonally, by day of the month, and even by day of the week.

For example, people use a lot of cash in busy shopping seasons.

Also, over the weekend, people use ATMs to withdraw a lot of cash from banks for shopping and entertainment.

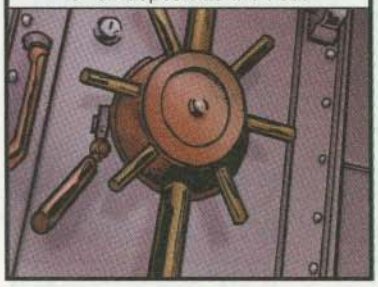
ATM
I guess I'm not the only one who thought there'd be no line at the ATM because everyone would be spending the day watching the pro football games.

People get the extra cash they hold from banks. The banks, in turn, get it from the Fed, and they pay for it by having their accounts at the Fed debited.

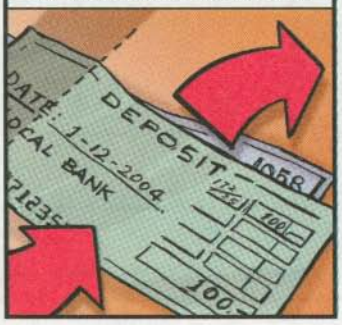
So, when people hold more cash, the amount of funds that banks have to lend goes down. That could cause interest rates to rise if the Fed didn't use open market operations to offset the drop in bank funds.

The public seems to be stocking up on cash. We'll have to buy some government securities to restore the banks' lending ability and keep the federal funds rate low.

Reserve requirements are another, though far less frequently used, tool of monetary policy. Reserve requirements are the percentages of certain deposits that banks must have either in their own vaults or on deposit at the Fed.

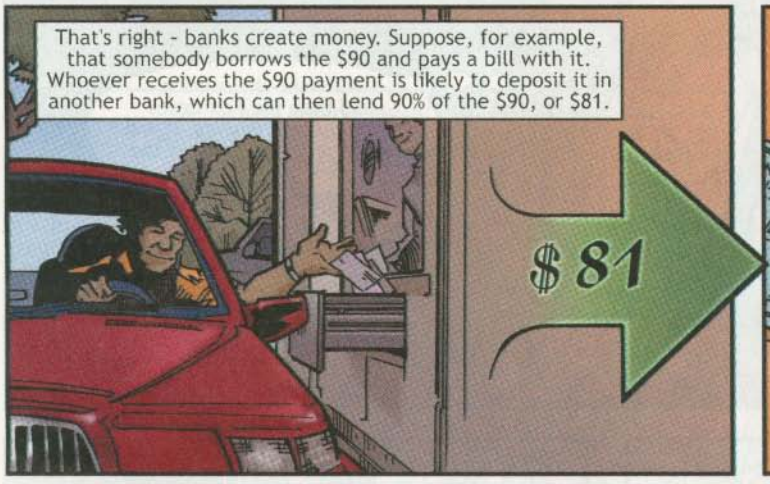


For example, if the reserve requirement is 10%, a bank that receives a $100 deposit must have $10 in its vault or at its Federal Reserve Bank.

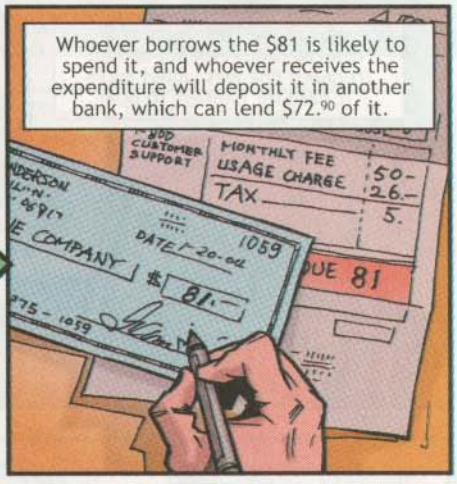


Reserve requirements are a powerful tool, because they affect the ability of the banking system to create money.

That's right - banks create money. Suppose, for example, that somebody borrows the $90 and pays a bill with it. Whoever receives the $90 payment is likely to deposit it in another bank, which can then lend 90% of the $90, or $81.



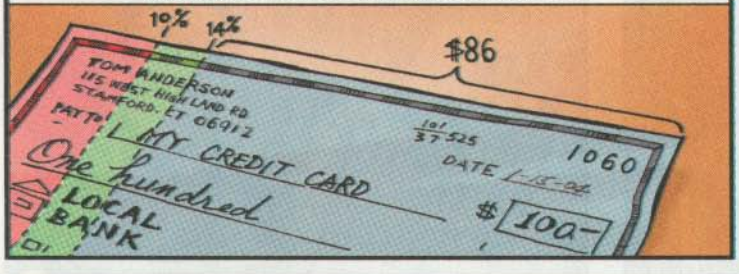
Whoever borrows the $81 is likely to spend it, and whoever receives the expenditure will deposit it in another bank, which can lend $72.90 of it.



As the process continues, the banking system will expand an initial $100 deposit into as much as $1,000 of deposits. These deposits are considered part of the nation's money supply.

$100+$90+$81+$72.90+ ... + ... = $1,000

By law, the Fed can set the reserve requirement on checking accounts anywhere from 8% to 14%. If the requirement were 14%, rather than 10%, the bank that received the $100 deposit would keep $14 on reserve and lend a maximum of $86, rather than $90...



... and the next bank would be able to lend just 86% of $86, or $73.96, rather than $81.

With a 14% reserve requirement, the banking system would be able to expand the initial $100 deposit into just $714, rather than $1,000.

$100+$86+$73.96+$63.61+ ... + ... = $714

So, reserve requirements are a powerful tool, as they affect the ability of the banking system to create money. However, the Fed rarely changes reserve requirements.

After cutting the requirement on checking accounts from 12% to 10% in April 1992, the Fed left the requirement unchanged through early 2004, when this booklet was written.

One reason the Fed rarely changes reserve requirements is that frequent changes would make it hard for bankers to plan.

If I make these loans and then the Fed raises reserve requirements, it will be hard for me to meet the new requirement.

On the other hand, if I don't make the loans and the Fed leaves the requirement alone, I'll be losing the chance to earn some income.

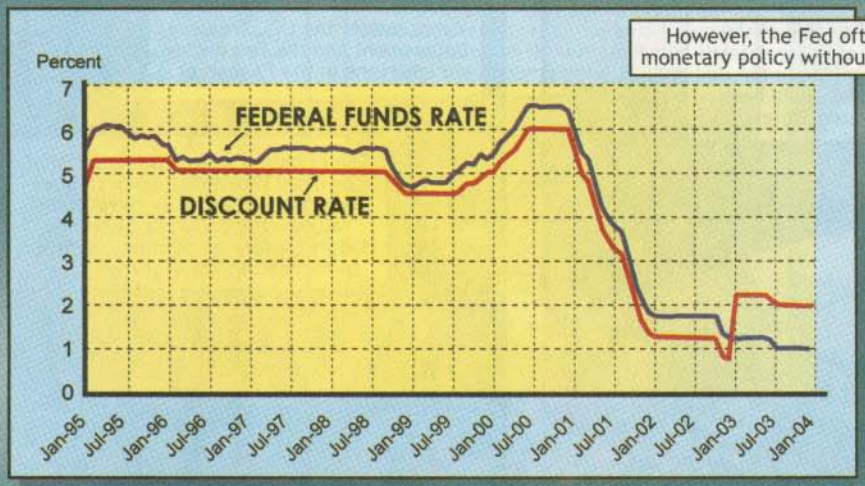
Also, when the Fed has to reduce the growth of money and credit, it would rather not do so by raising reserve requirements, because the requirements impose a kind of tax or cost on banks.

Every dollar the Fed tells me I have to keep on hand costs me the income I could otherwise earn by lending the dollar.

Still another tool of monetary policy involves the **discount rate**, the interest rate that the Fed charges banks on short-term loans. Changes in the discount rate can influence other interest rates.

FED RAISES DISCOUNT RATE

The Fed must want to discourage some lending and spending in order to fight inflation.

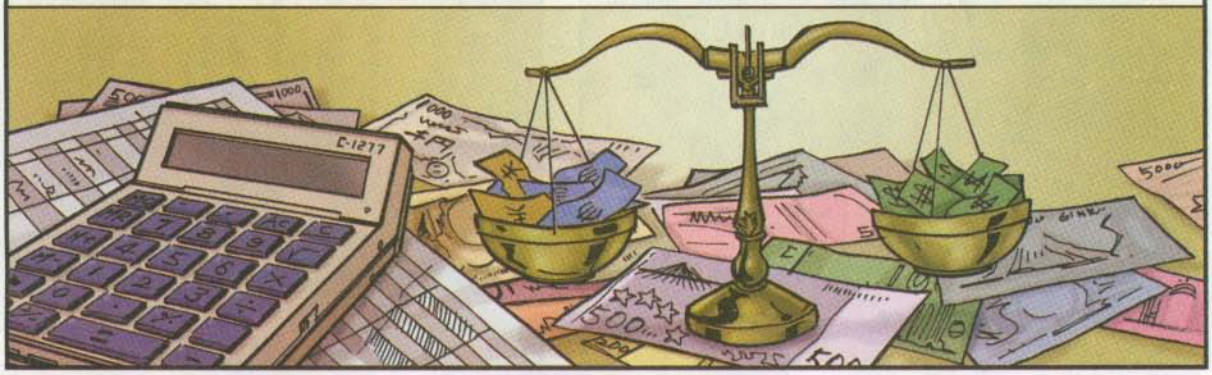


However, the Fed often implements changes in monetary policy without changing the discount rate.

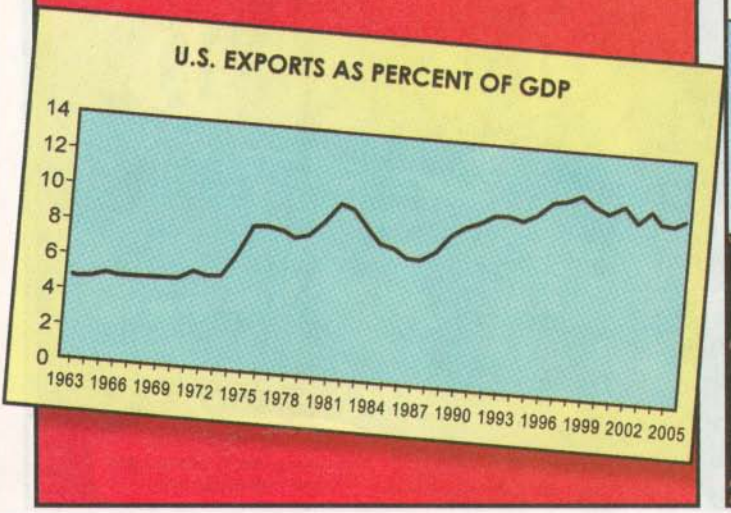
For example, between mid-1995 and the end of 1998, the Fed changed its target for the federal funds rate on seven occasions, but on only three of those occasions did it change the discount rate.

The discount rate refers to a primary credit rate on loans to the financially strongest banks and a higher secondary credit rate on loans to other banks.

The Federal Reserve also affects the U.S. economy when it intervenes for the U.S. monetary authorities - the Treasury Department and the Fed - in the foreign exchange markets, in which dollars are exchanged for foreign currencies such as the Japanese yen and the euro.



The foreign exchange (FX) value of the dollar is growing in importance as international trade and finance expand. Exports, for example, now account for 10% of the output of the U.S. economy, up from less than 5% in the early '60s.



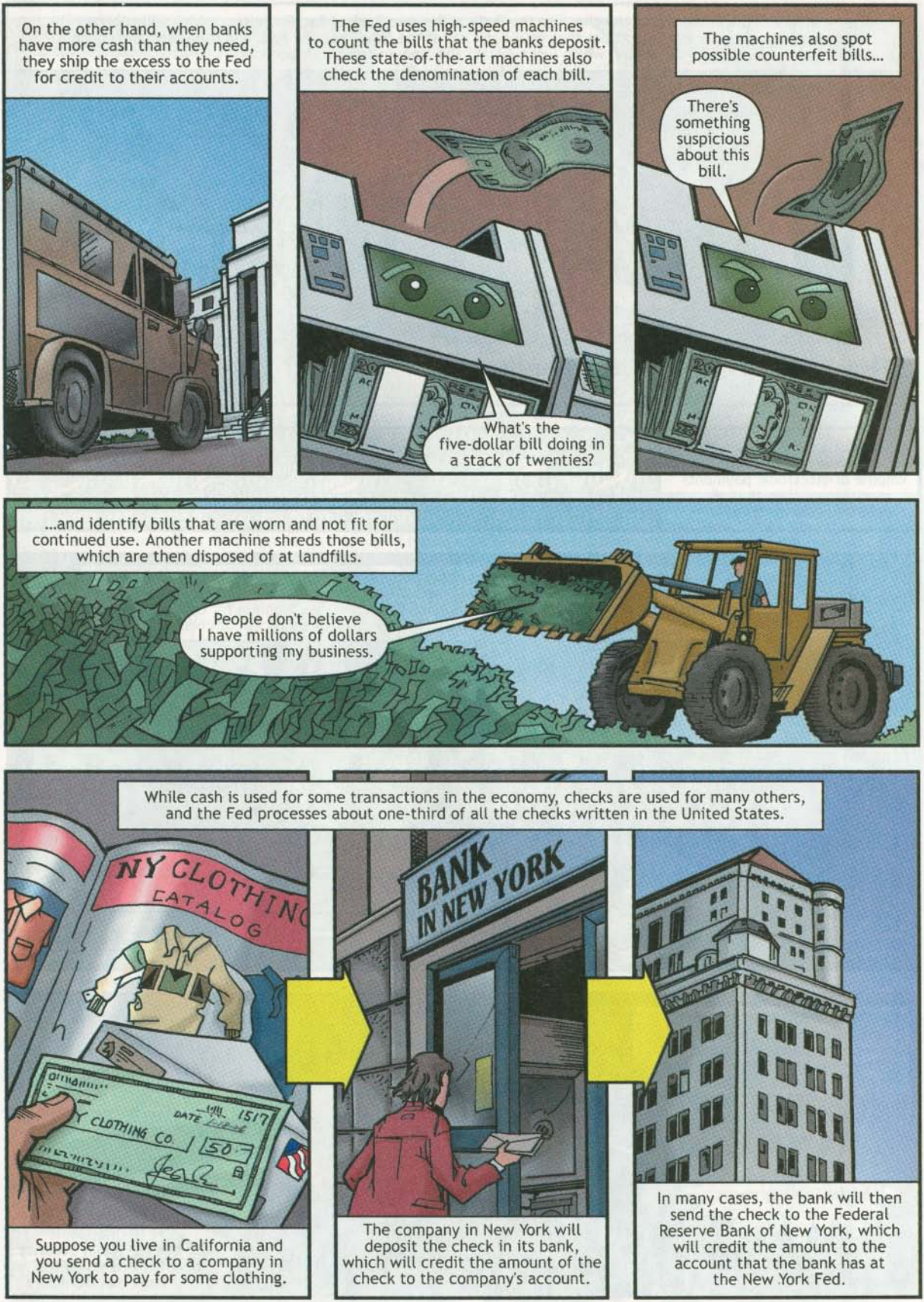
The FX value of the dollar can affect the economy in a number of ways. If the dollar appreciates (rises in value), foreigners have to pay more in their currencies to buy U.S. goods. The higher effective price, in turn, could lead foreigners to buy fewer U.S. goods, causing some U.S. companies to lose profits.

On the other hand, if the FX value of the dollar falls (that is, the dollar depreciates) U.S. consumers have to pay more for foreign-made goods, and that could help cause inflation in the United States.
FOREIGN CAR DEALERSHIP
The fall in the value of the dollar has really raised the price of these cars.

On occasion, the U.S. Treasury Department and the Fed decide to intervene in the FX market.
The Fed then executes the decision by using foreign currency to buy dollars, in order to try to raise the value of the dollar, or by selling dollars for foreign currency, in order to reduce the value of the dollar.
The dollar has been falling in value. We'd like to see that stop.

These interventions are small compared with the total amount of FX trading, so they don't influence supply and demand conditions in the currency market. Rather, they influence market sentiment relating to the foreign exchange value of the dollar.

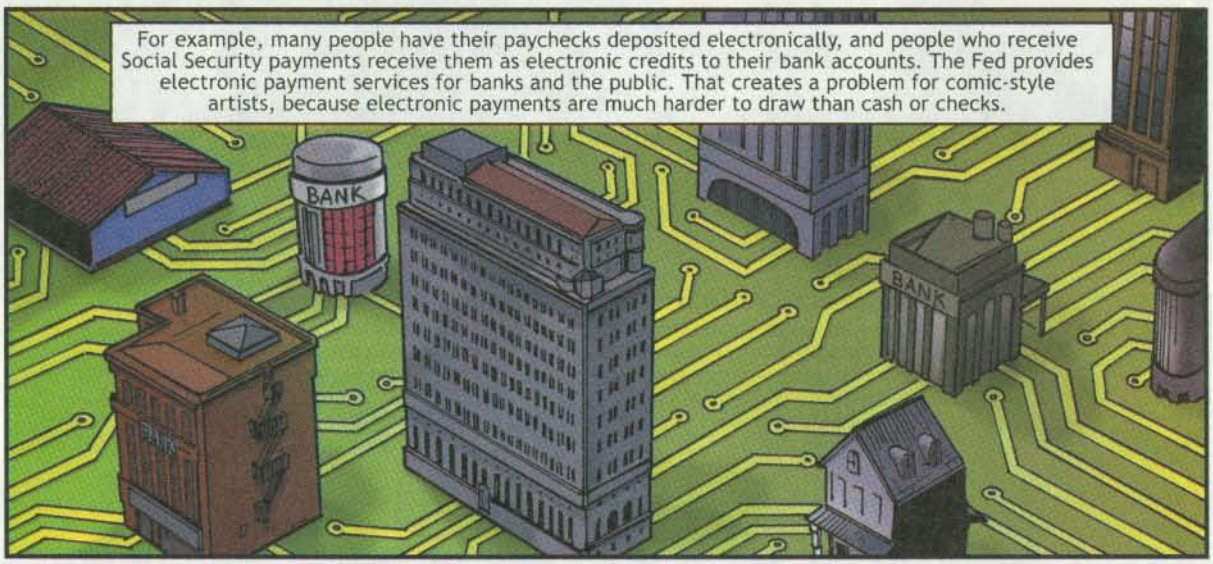
So far, we've seen that the Fed has various ways to foster a healthy economic climate. The Fed also provides banks with services that help the economy function smoothly. Some of these activities make it easier for people to make payments. For instance, the Fed provides banks with cash to meet their customers' needs.
We're running out of fifty-dollar bills. Let's order some from the Fed.


On the other hand, when banks have more cash than they need, they ship the excess to the Fed for credit to their accounts.
The Fed uses high-speed machines to count the bills that the banks deposit. These state-of-the-art machines also check the denomination of each bill.
What's the five-dollar bill doing in a stack of twenties?
The machines also spot possible counterfeit bills...
There's something suspicious about this bill.
...and identify bills that are worn and not fit for continued use. Another machine shreds those bills, which are then disposed of at landfills.
People don't believe I have millions of dollars supporting my business.
While cash is used for some transactions in the economy, checks are used for many others, and the Fed processes about one-third of all the checks written in the United States.
NY CLOTHING CATALOG
BANK IN NEW YORK
Suppose you live in California and you send a check to a company in New York to pay for some clothing.
The company in New York will deposit the check in its bank, which will credit the amount of the check to the company's account.
In many cases, the bank will then send the check to the Federal Reserve Bank of New York, which will credit the amount to the account that the bank has at the New York Fed.

The New York Fed will then send the check to the Federal Reserve Bank of San Francisco, which will subtract the amount of the check from the account that your bank has at the San Francisco Fed, and then send the check to your bank, which will subtract the amount from your account.

While cash or checks are used for most transactions, the dollar volume of electronic payments is much larger than that of checks and cash combined.

For example, many people have their paychecks deposited electronically, and people who receive Social Security payments receive them as electronic credits to their bank accounts. The Fed provides electronic payment services for banks and the public. That creates a problem for comic-style artists, because electronic payments are much harder to draw than cash or checks.



While electronic payments are hard to draw, they do have some major advantages: They are both faster and more secure than either cash or checks.

Hand over your Social Security check.

Sorry to disappoint you, but my Social Security benefits are deposited in the bank electronically.

The Fed also provides loans to banks under certain circumstances.
Banks typically borrow from private sources, but may come to Federal Reserve Banks when private funding is not available or temporarily too costly.
One reason that a bank may borrow from the Fed is that it has experienced unexpected, large withdrawals.
We had a huge outflow of deposits this week, and now we can't meet our reserve requirement. We've exhausted our other credit sources; now we'll have to borrow from the Fed.
Since 2003, the interest rate which banks pay when they borrow from the Fed has been higher than the federal funds rate, the interest rate at which banks with extra reserves lend to banks that need the reserves.
I don't have enough reserves to meet my reserve requirement.
BANK
Well, you're in luck. I have extra reserves and I can lend them to you.
BIG TOWN BANK
As of 2003, banks are permitted to borrow from the Fed at the primary or secondary credit rate and then turn around and lend to other banks.
PRIMARY CREDIT RATE
BANK
However, since the primary and secondary credit rates are higher than the federal funds rate, opportunities to make profitable loans to banks are few.
LOWER FEDERAL FUNDS RATE

The Fed has a special lending program, **seasonal credit**, for banks that face severe seasonal pressures each year - at certain times of the year, the banks have only limited deposits and they face a large demand for loans.

Under the seasonal credit program, banks can borrow for up to nine months each year. Most of the banks that use this program are in agricultural communities.

The farmers have to borrow now to plant their crops, and they won't be sending us many deposits until they harvest the crops. We may have to ask the Fed to give us a loan until then.

The Fed also performs financial services for the U.S. government.

Just like everyone else, I need a bank account to pay my bills.

Thus, people who get federal income tax refunds, whether by check or by electronic payment, receive the payments from a government account at the Fed.

TAX INFO

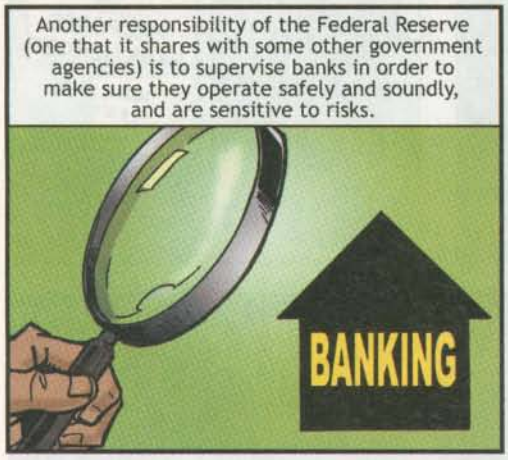
The government didn't have to send you a check. Your tax refund was deposited in your account electronically.

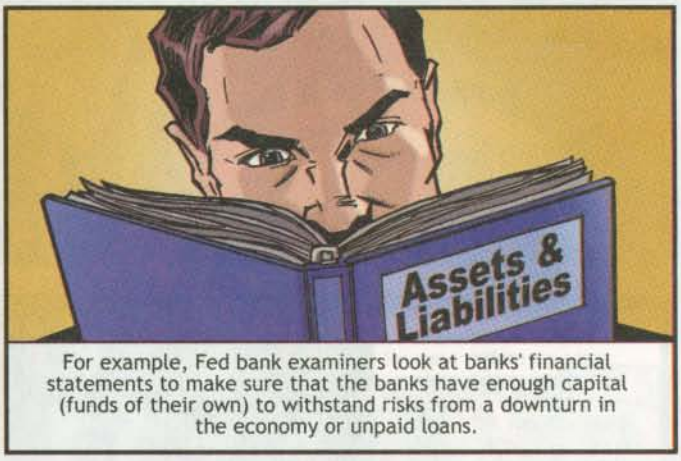
The Fed also plays a role in the government's borrowing.

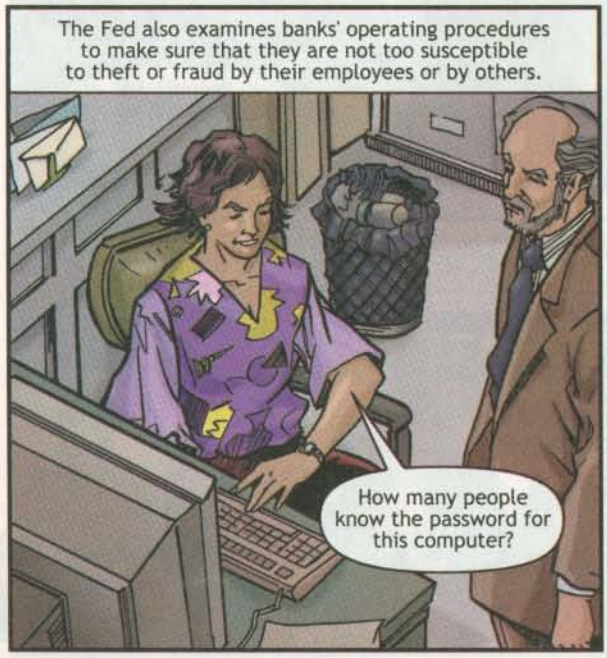
When people buy paper U.S. Savings Bonds, their applications for the bonds are processed at certain Federal Reserve locations.

FED

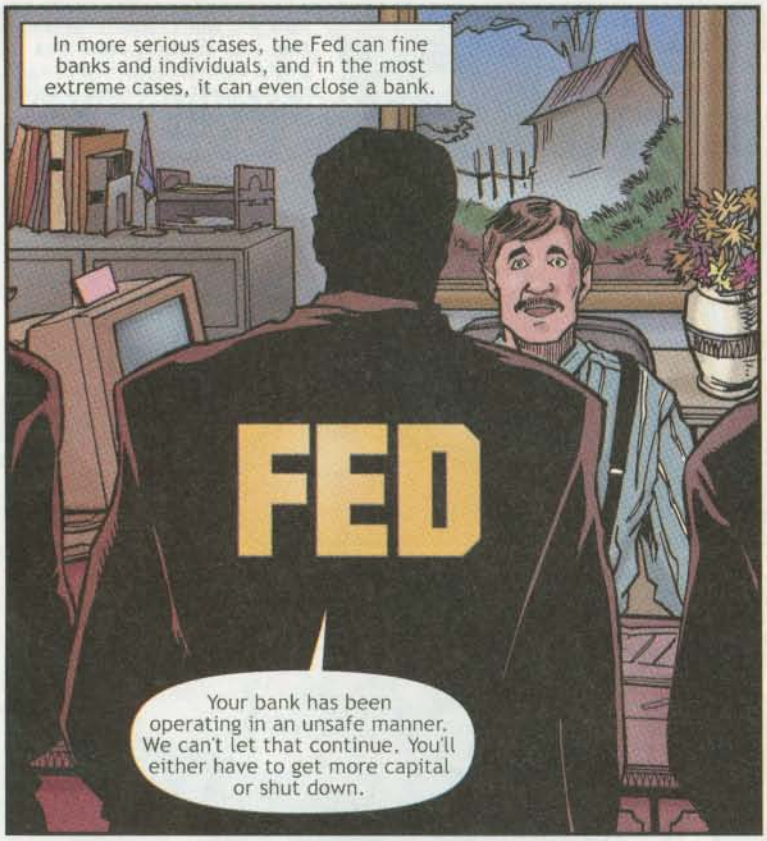
Now, debt or IOUs that the federal government issues exist only as electronic records. Individuals may put these electronic securities in Legacy Treasury Direct accounts.
Now you won't have to worry that your Treasury securities might be destroyed in a fire, and you won't even need a safe deposit box to store them. They're perfectly safe as electronic securities.
US TREASURY BOND
M. TELLER


Another responsibility of the Federal Reserve (one that it shares with some other government agencies) is to supervise banks in order to make sure they operate safely and soundly, and are sensitive to risks.
BANKING


Assets & Liabilities
For example, Fed bank examiners look at banks' financial statements to make sure that the banks have enough capital (funds of their own) to withstand risks from a downturn in the economy or unpaid loans.


The Fed also examines banks' operating procedures to make sure that they are not too susceptible to theft or fraud by their employees or by others.
How many people know the password for this computer?

When the Fed finds a problem in the way a bank operates, it often can be resolved without penalty or any other supervisory action.
I'll change the password right now, and I won't give anyone the new password.

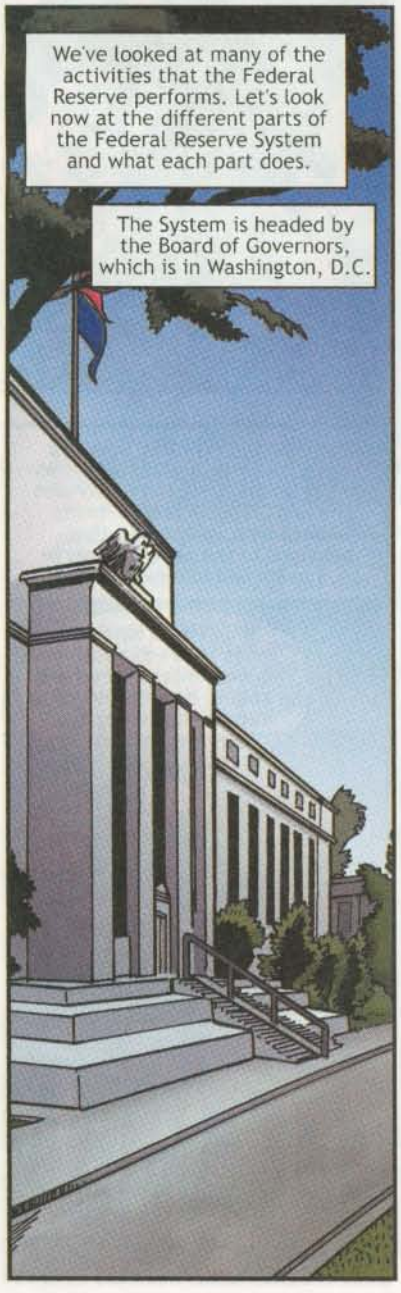

In more serious cases, the Fed can fine banks and individuals, and in the most extreme cases, it can even close a bank.
FED
Your bank has been operating in an unsafe manner. We can't let that continue. You'll either have to get more capital or shut down.

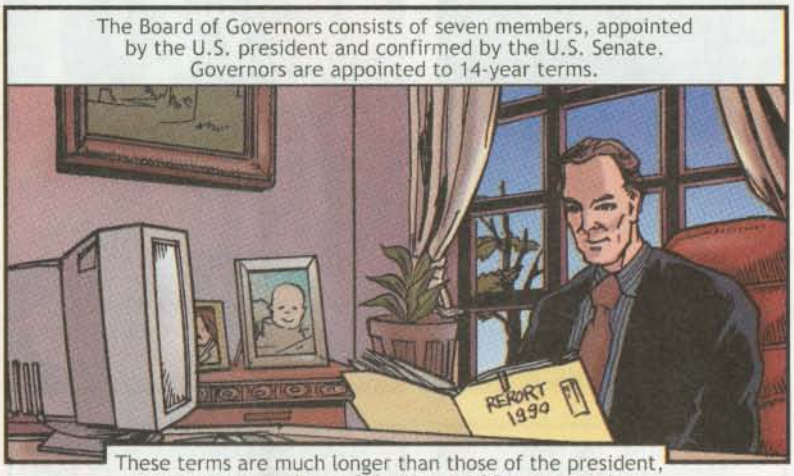
Besides supervising banks for safety and soundness, the Fed considers applications by banks for mergers or to open new branches. The purpose of the approval process is to make sure the banking system remains competitive and operates in the public interest.
I think the merger will allow the bank to operate more efficiently and serve the public better.
MEETING HALL
FEDERAL RESERVE HEARING
ON
PROPOSED BANK MERGER
TUESDAY, NOV. 19
9:30 AM

The Fed also enforces some consumer and community protection laws. One is the Community Reinvestment Act, which encourages banks to meet the credit needs of the community, especially in low- and moderate-income neighborhoods.
People from any neighborhood who qualify for loans should get them.

In addition, the Fed monitors compliance with the Equal Credit Opportunity Act, which says that people may not be denied credit on the basis of race, religion, sex or certain other factors.

Another law enforced by the Fed is the Fair Credit and Charge Card Disclosure Act, which says that applications for credit cards must tell you whether you have to pay an annual fee for the card and what interest rate you have to pay on the balance in your account.
To get this credit card, you have to pay a $20 fee each year. On the other hand, the interest rate on this card is lower than what some of the other cards charge.


We've looked at many of the activities that the Federal Reserve performs. Let's look now at the different parts of the Federal Reserve System and what each part does.
The System is headed by the Board of Governors, which is in Washington, D.C.

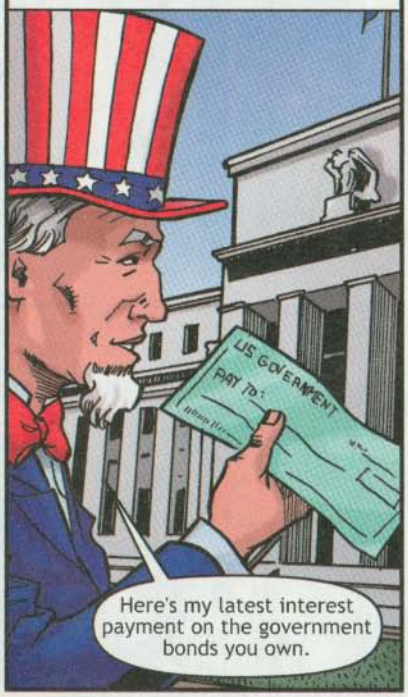

The Board of Governors consists of seven members, appointed by the U.S. president and confirmed by the U.S. Senate. Governors are appointed to 14-year terms.
REPORT 1990

These terms are much longer than those of the president, senators, or members of the House of Representatives.
REPORT 2004

Also, the 14-year terms are staggered. That means they don't all expire at the same time. One term expires every two years. The staggered 14-year terms reduce the influence of politics on the Fed.
If all the Fed's governors complete their terms, I'll be able to appoint only two governors in my four-year term.
PRESIDENT

Another factor that promotes the Fed's political independence is that the Fed does not have to rely on appropriations from Congress.

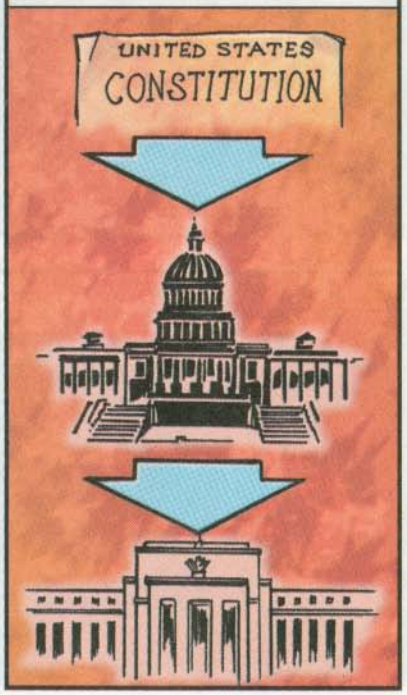
The Fed is financially self-sufficient. Its income comes predominantly from interest it receives on its holdings of U.S. government securities.



Not only is the Fed financially self-sufficient, but it actually takes in much more income each year than it spends. The Fed returns to the U.S. Treasury the excess of what it takes in over what it spends.

Of course, the Fed's independence is far from total. By law, the chairman of the Federal Reserve has to testify before Congress at least twice a year regarding the Fed's monetary policy.

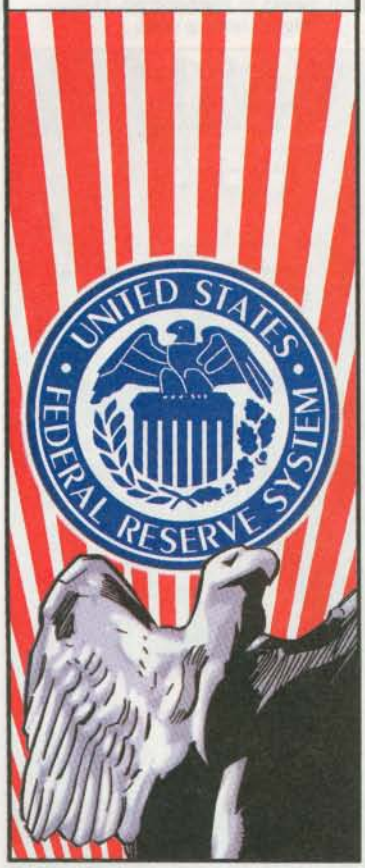
Also, it was Congress that created the Fed. The U.S. Constitution gives Congress the power to coin and regulate the value of money, and Congress has decided to delegate that authority to the Fed. At times, Congress has changed the Fed's powers.



For example, in 1980, Congress passed a law saying that all banks in the United States have to meet the Fed's reserve requirements. Until then, only banks that belonged to the Federal Reserve System had to meet them.

If all banks have to meet the Fed's reserve requirements, the Fed will be able to do a better job of influencing money and credit conditions.
And that should help the economy grow without inflation.

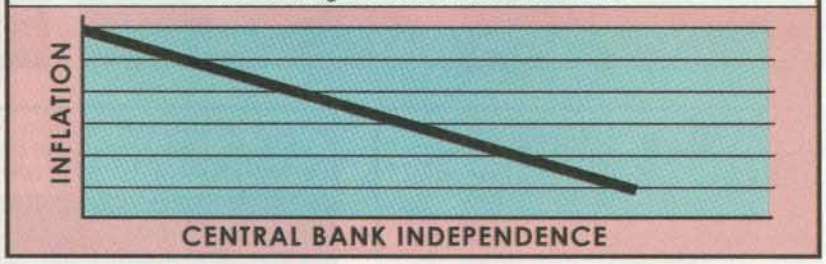
In any case, the Fed is more independent than other parts of the government.



Interestingly, other countries have taken steps in recent years to increase the political independence of their central banks.

MORNING NEWS
CENTRAL BANK INDEPENDENCE INCREASED IN MEXICO
PACIFIC NEWS
CENTRAL BANK OF JAPAN GETS MORE INDEPENDENCE

That's because independence helps a central bank focus on long-term economic problems. Indeed, research shows that countries with more central bank independence tend to be more successful in controlling inflation than other countries.

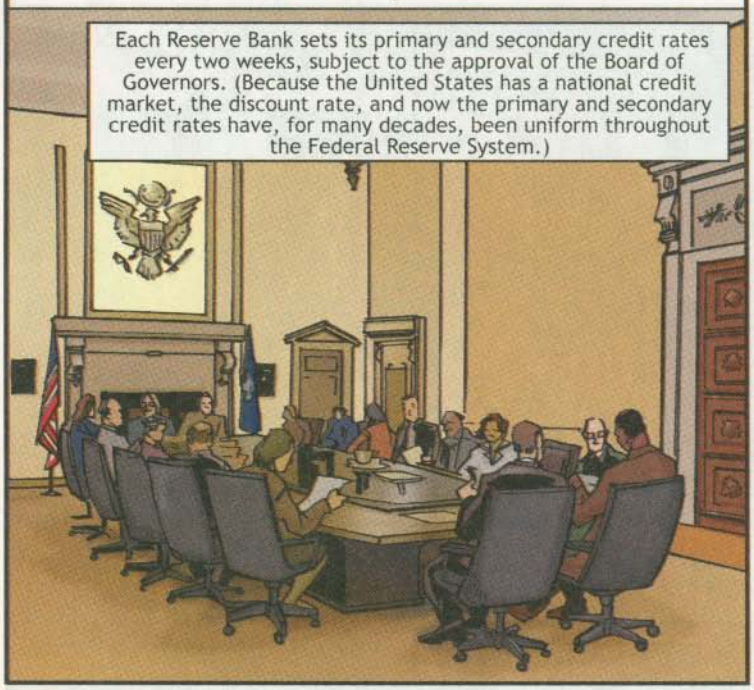


In addition to the Board of Governors, the Fed consists of 12 Federal Reserve Banks spread around the country. The Reserve Banks provide financial services for the U.S. government, supervise banks in their districts, and provide banks with services, such as the provision and storage of cash, loans, and check processing.

This map shows the location of the Reserve Banks and the district that each one serves. As shown on the map, the Reserve Banks are concentrated in the eastern half of the United States. That's because when the Fed was created, U.S. population, business and financial activities were far more concentrated in the east than they are now.

Both the Board of Governors and the Reserve Banks play a role in the monetary policy process. The Board of Governors sets reserve requirements.

Each Reserve Bank sets its primary and secondary credit rates every two weeks, subject to the approval of the Board of Governors. (Because the United States has a national credit market, the discount rate, and now the primary and secondary credit rates have, for many decades, been uniform throughout the Federal Reserve System.)

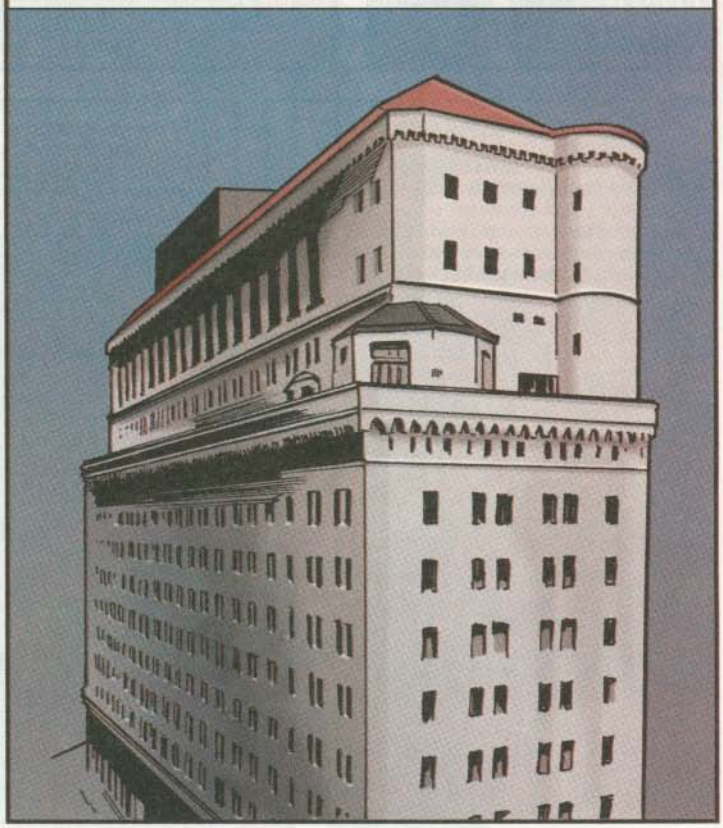


Meanwhile, monetary policy is determined by a group called the Federal Open Market Committee (FOMC), which meets in Washington, D.C., eight times a year.

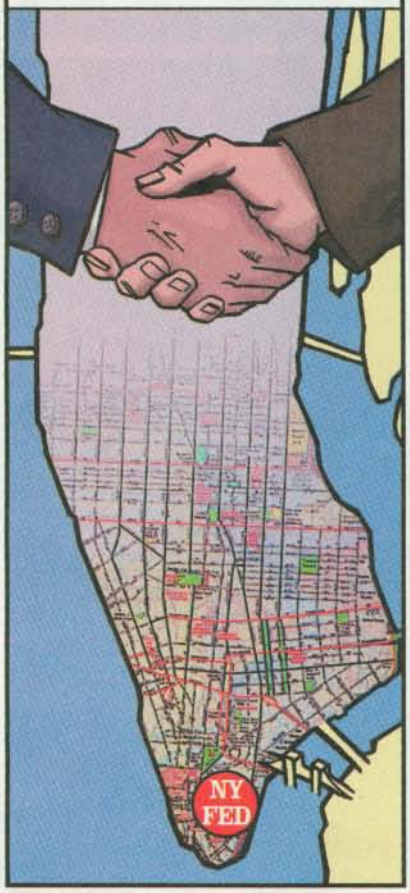
The meetings are attended by the members of the Board of Governors and the presidents of all 12 Reserve Banks. There are only 12 voting members, however — the seven governors and five of the Reserve Bank presidents.

The president of the Federal Reserve Bank of New York is always a voting member, and the presidents of the other Reserve Banks rotate one-year terms as voting members.

There are several reasons why the president of the New York Fed is a permanent voting member of the FOMC. One is that the New York Fed conducts all the open market operations for the Federal Reserve System.



In addition, when the U.S. monetary authorities intervene in the foreign exchange market, the intervention is carried out by the New York Fed.

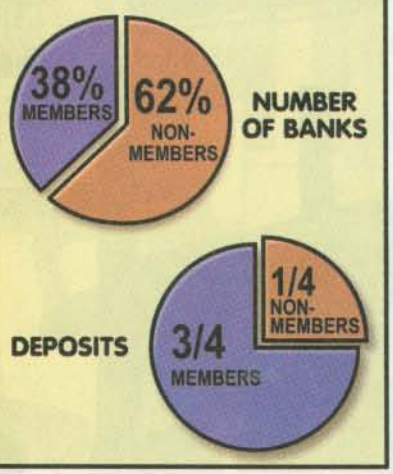


The Federal Reserve Bank of New York also provides a variety of services to foreign central banks.

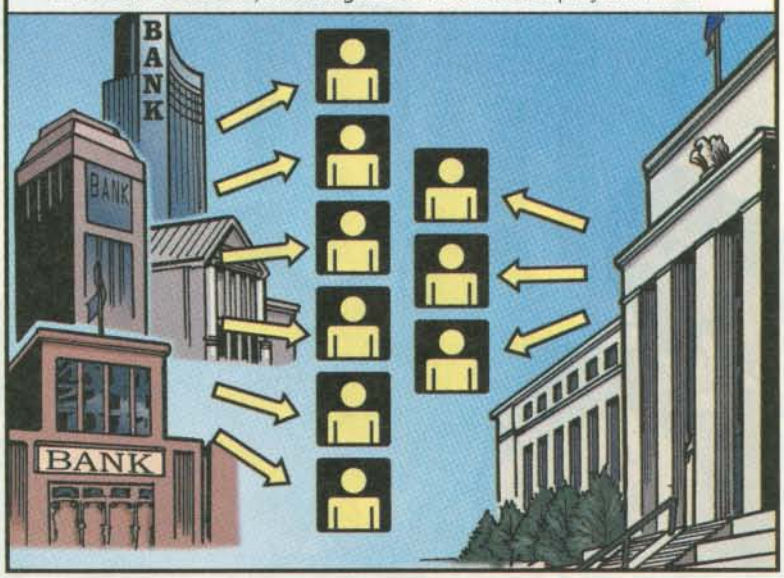
For example, the New York Fed stores billions of dollars' worth of gold for foreign central banks. The gold makes a dramatic sight, and the Federal Reserve Bank of New York invites visitors to see it. (Indeed, each year, more that 20,000 visitors do just that.)

To schedule a tour of the gold vault, call (212) 720-6130.

Fewer than half the banks in the country – about 38% – are members of the Federal Reserve System. However, they tend to be the larger banks, and they have about three-quarters of all U.S. bank deposits.



The member banks choose six members of the board of directors of their local Reserve Bank, and the Board of Governors chooses the three other directors, including the chairman and deputy chairman.



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